> It is unclear exactly how the present invention may be made or used.

< It is explained that the signal is received and demodulated with conventional radio technology. Once converted to digital form, it can be processed with a digital computer or a digital signal processor using the processes described and the equations provided to remove unwanted reflections and to measure reflections from targets. The original signal can be restored and the targets can be tracked.

> The Detailed Description is insufficient in providing an adequate disclosure of the present invention.

< Detail has been added which completely describes how the invention works.

> For example, an application of filter weights is discussed on page 4, paragraph 4 but no discussion of how the filter weights are calculated and how they are applied is provided.

< The filter weights are applied as defined in equations (15), (16) and (17). They are calculated by nonlinear least squares, a simple form of which is described in detail in equations (20), (21) and (22).

> It is stated that the present invention "removes the multipath noise from the received signal" on page 4, paragraph 5 but it is unclear where the discussion of the removal of the multipath is discussed.

< In the second paragraph of the Detailed Description, the formation and subtraction of the sum of the multipath replicas is discussed. This describes how the multipath noise is removed from the whitened received signal producing the residual, a purified form of the whitened direct path signal. The process of removal is described in equation (17). A more detailed discussion of the removal of the multipath is mathematically described in equations (23) through (32).

> Paragraph 6 appears to describe the receiving and sampling of the signal but it is unclear how this removes the multipath from the signal or why it is important in the present invention.

< What is described is the process of receiving, demodulating, digitizing the signal and converting it to complex digital form. This preconditioning is necessary to the digital signal processing that follows. Additional description has been added.

> Pages 5 and 6 provide equations that appear to teach how the multipath is removed but it is difficult to understand how and why these equations are applied without a written description as to their relation to the present invention.

< All equations have been numbered. The derivation of each equation is explained in detail. The relation of each equation to the Figure and the invention has been described. A mathematical explanation of the working of the invention has been added.

> When the figure is referred to, it is unclear exactly what parts of the figure are being referred to without the use of reference numbers or labels.

< Reference numbers have been added to the Figure. No changes to the Figure proper have been made.

> For example, it is unclear what part is to be labeled "residual" and a low pass filter is discussed on page 4, paragraph 6 but no low pass filter appears to be in the figure.

< The residual in the Figure has been given the reference number **17**. The low pass filter is not in the Figure as it is described as a part of the Real to Complex process which is in the Figure.

> It is difficult to follow the Specification without specific reference to items in the figure.

< Reference numbers in the Figure are referred to in the Specification as bold numbers.

> On page 4, paragraph 6, it is unclear whether the referral to numbered references is meant to incorporate the references into the disclosure of the present invention. If they are not meant to be incorporated by reference, it is unclear why they are cited.

< In the REFERENCE section is the statement: "All footnoted references are hereby incorporated by reference."

> 2. The cross reference is objected to because it is improper. Cross-references are only to be used to disclose prior work done by the inventor.

< The section "Cross Reference to Related Applications" has been deleted.

> 3. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

< The enclosed clean copy of the Amended Specification is double spaced and on high quality paper. The marked up copy is also double spaced.

Respectfully submitted,

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